

# The Futures Initiative and Preparedness



**Coordinating Center for Terrorism Preparedness  
and Emergency Response**

*September 27, 2005  
Annual Conference New Jersey State and Local Health Officials*



## Objectives of the Session

### Overview of CDCs “Futures Initiative” in relation to Preparedness activities

- Purpose of the Futures Initiative
- Preparedness workforce development
- Partnerships for success
- Academic Institution roles



## Objective 1

What is the purpose of the CDC  
Futures Initiative?



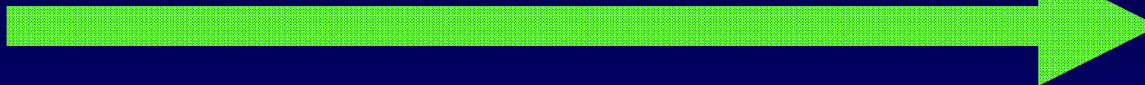
## Purpose of the Futures Initiative

- Began in summer, 2003
- Purpose: To ensure CDC has the capacity to protect and improve the health of the American people in the 21st Century
- Rationale:
  - Changing world, need to be better prepared to respond to multiple public health challenges:
    - a. aging population
    - b. global threats of disease and terrorism
    - c. Obesity
    - d. epidemic threats of chronic diseases
  - Need to strengthen and develop the public health workforce and infrastructure

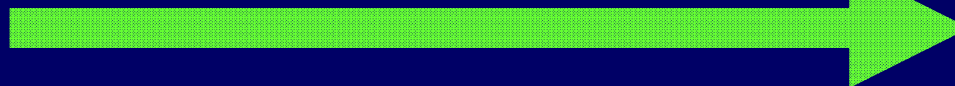


## Process to inform Futures Initiative

**Input**



**Ideas**



- Outside-in
- Interactive
- Driven by data
- Focused on customers
- Strategic direction first, then structure and processes

**Implementation**



***Impact***



**Health  
Protection  
for the 21st  
Century**

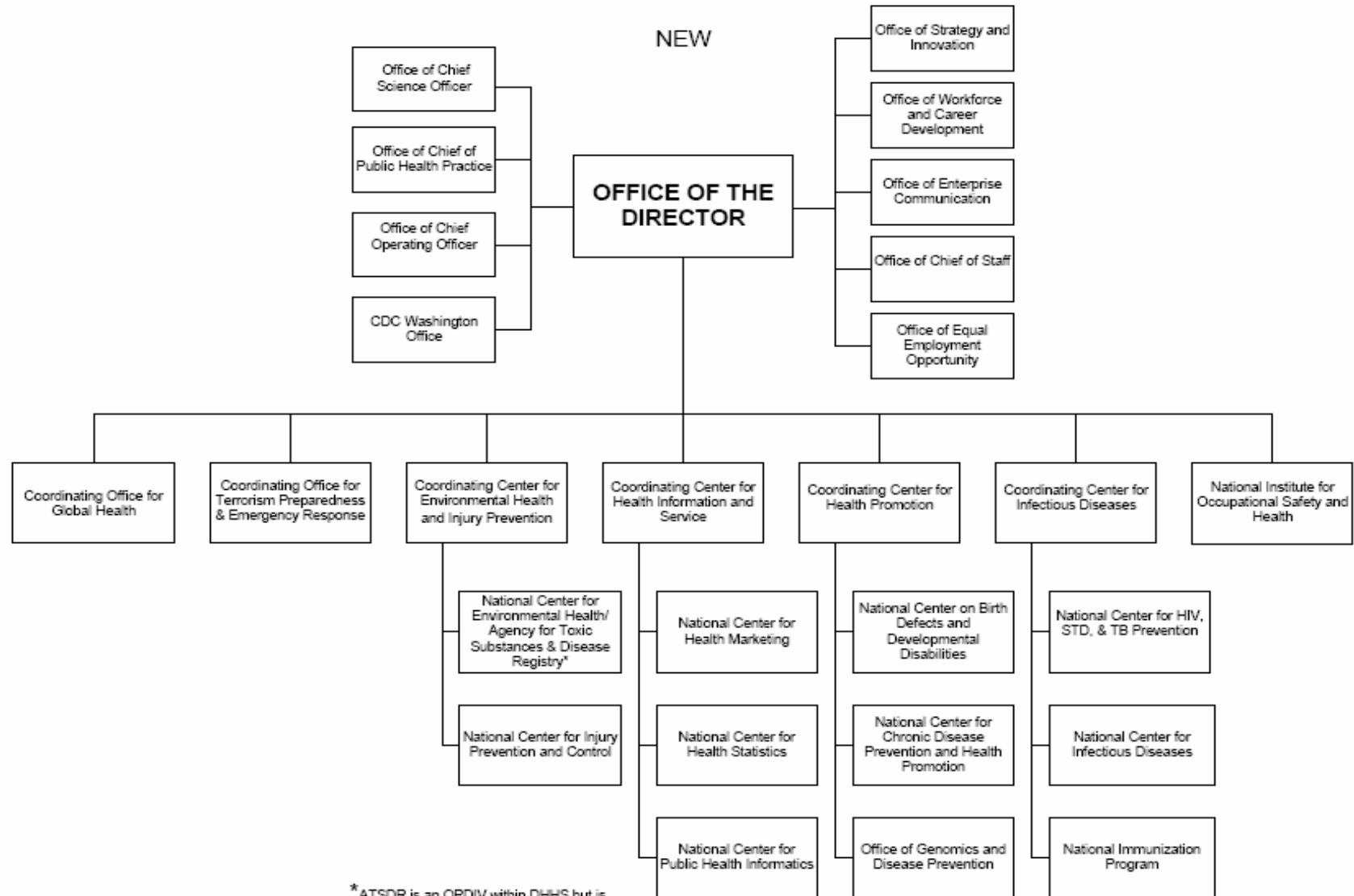


## Strategy for change

Organizational change based on following characteristics:

- Science as foundation
- Overarching goal setting and performance management
- Strategic analysis
- Innovation incubator
- Health marketing focus
- Synergy and collaboration
- Workforce development

# DEPARTMENT OF HEALTH AND HUMAN SERVICES CENTERS FOR DISEASE CONTROL AND PREVENTION (CDC)

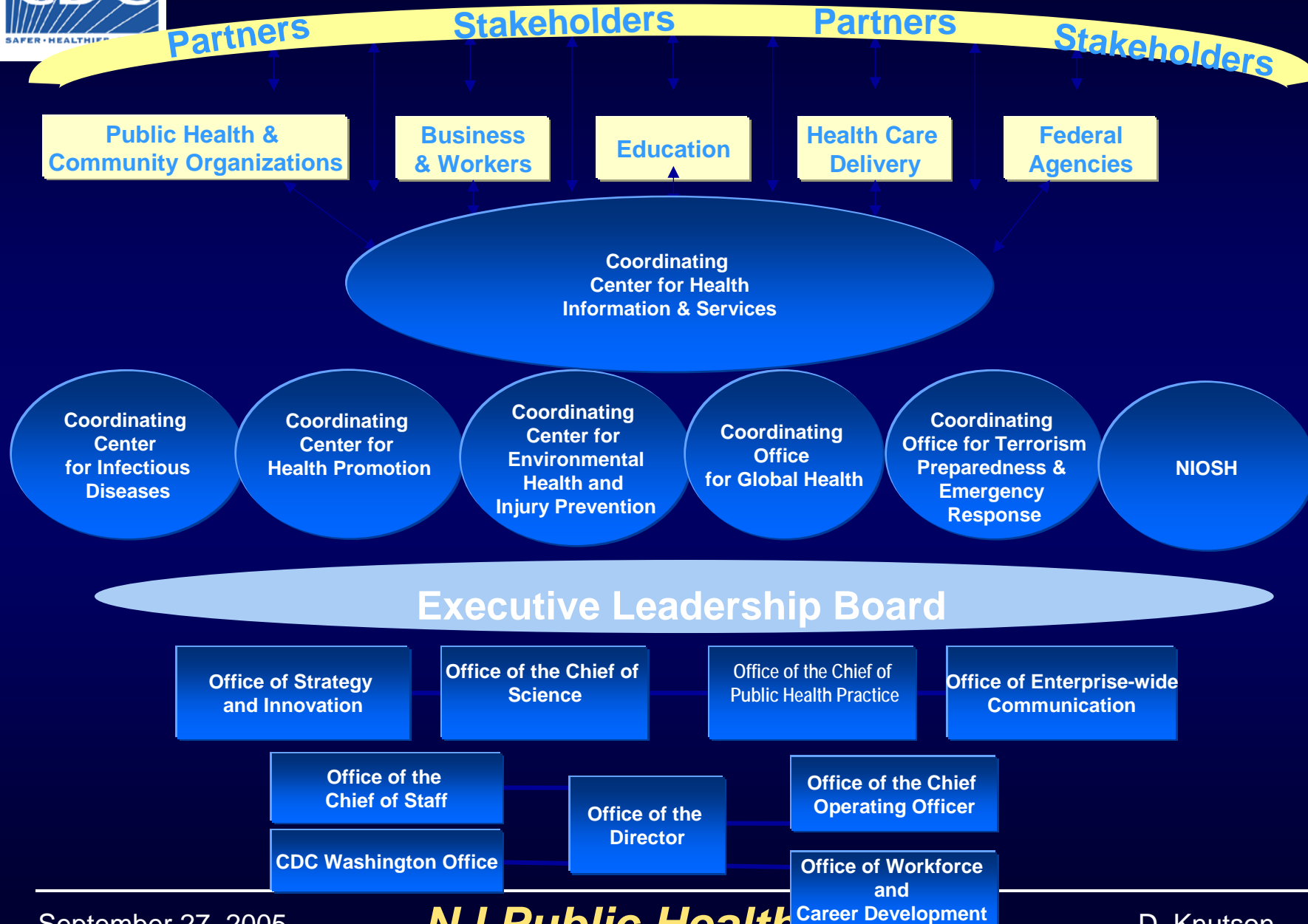


\* ATSDR is an OPDIV within DHHS but is managed by a common Ofc of the Director with NCEH

April 2005



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September 27, 2005

**NJ Public Health Officials**

D. Knutson

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## Strategy for change

### Established Coordinating Centers and Offices:

- Identifying and capitalizing on opportunities for coordination and integration of research between centers and programs to increase CDC's health impact.
- Decreasing duplication and redundant activities in center programs, thereby maximizing resources available to achieve public health goals and streamline logistics for CDC interaction with partners.
- Providing leadership, management, and accountability for cross-center goals and programs.



## Strategy for change

### Characteristics of Coordinating Centers and Offices:

- CC/CO staffing is not to exceed 20 FTEs.
- The standard positions in the CC/COs are:
  - CC/CO Director
  - Chief Management Officer
  - Workforce and Career Development Officer
  - Strategy and Innovation Officer
  - Enterprise Communications Officer
  - Science Officer



## Strategy for change

### Strategic Imperative Driven

- **Health impact.**
  - CDC will prioritize its science, research, and programs to achieve measurable health impact for the public, and emphasize prevention of early risk factors and support of healthy behaviors.
- **CDC will be a customer-centric organization.**
  - CDC's primary customers are the people whose health we are working to protect.
- **Public health research.**
  - Science will remain the foundation on which all CDC programs, policies, and practices are based.



## Strategy for change

### Strategic Imperative Driven

- **Leadership for the nation's health system.**
  - CDC must assume greater leadership to strengthen the health impact of the state and local public health systems.
- **Global health.**
  - CDC will establish clear priorities for its global programs and increase global connectivity to ensure rapid detection and response to emerging health threats.
- **Effectiveness and accountability.**
  - CDC will modernize its management and business practices to become more efficient, effective, and accountable.



## Objective 2

What does the future hold for preparedness?

What can we as state and local health officials expect from CDC?



## Strategy for change

### Goals driven

- **Preparedness**

- People in all communities will be protected from infectious, occupational, environmental, and terrorist threats.

- **Health Promotion and Prevention of Disease, Injury, and Disability**

- All people, especially those at higher risk due to health disparities, will achieve their optimal lifespan with the best possible quality of health in every stage of life



## Strategy for Change

### ■ Cooperative agreement

- Written with the goals as a framework for activities
- Accompanied by 34 “performance measures” to assure we are getting closer to goals
- Measurement of the performance
- Priority Local Agencies

### ■ National Agenda

- DHS and the “Target Capabilities List”
- National Preparedness Goal
- NIMS
- NRP



# Preparedness Goals

Pre –Event	Event	Post-Event
<p><i>Prevent</i></p> <p>1) Increase the use and development of interventions known to prevent human illness from chemical, biological, radiological agents and naturally occurring health threats.</p> <p>2) Decrease the time needed to classify health events as terrorism or naturally occurring in partnership with other agencies</p> <p><i>Detect and report</i></p> <p>3) Decrease the time needed to detect chemical, biological, radiological agents in tissue, food or environmental sample that cause threats to the public's health.</p> <p>4) Improve the timeliness and accuracy of information regarding threats to the public's health</p>	<p><i>Investigate</i></p> <p>5) Decrease the time to identify causes, risk factors, and appropriate interventions for those affected by threats to the public's health.</p> <p><i>Control</i></p> <p>6) Decrease the time needed to provide countermeasures and health guidance to those affected by threats to the public's health</p>	<p><i>Recover</i></p> <p>7) Decrease the time needed to restore health services and environmental safety to pre-event levels.</p> <p>8) Increase the long-term follow-up provided to those affected by threats to the public's health.</p> <p><i>Improve</i></p> <p>9) Decrease the time needed to implement recommendations from after-action reports following threats to the public's health.</p>





## Performance Measures

<b>1. Increase the use and development of interventions known to prevent human illness from chemical, biological, radiological agents, and naturally occurring health threats</b>	<b>Percent of public health employees who have emergency response roles documented in their job descriptions that are trained in Incident Management</b>
	<b>Time to organize a NIMS-compliant medical and public health operations functional area with hospitals that supports: 1) incident epidemiological profiling; 2) pre-hospital care, 3) medical care, 4) mental health, 5) hazard threat/disease containment, 6) mass casualty care (Target: 3 hours of plan activation)</b>
	<b>Time from request for mutual aid to acknowledgement that request has been approved</b>
	<b>Time to complete the notification/alerting of the initial wave of personnel to staff emergency operations (Target: 60 minutes)</b>
	<b>Time to have initial wave of personnel physically present to staff emergency operations (Target: 90 minutes from notification)</b>



## Performance Measures

<b>2. Decrease the time needed to classify health events as terrorism or naturally occurring in partnership with other agencies</b>	Time to receive confirmed case reports of immediately notifiable conditions by public health agency (includes Biowatch and BDS)
	Time for State to notify local/tribal or local/tribal to notify State of receipt of a suspicious or confirmed case report of an immediately notifiable condition <b>(Target: 60 minutes from receipt)</b>
	Time to have a knowledgeable public health professional answer a disease report call and begin taking the report 24/7/365 <b>(Target: 15 minutes or less)</b>
	Percent of sub-typing data submitted to PulseNet within <b>72-96 hours</b> of receiving isolate in the laboratory
	Time to recommend public health courses of action to minimize human health threats identified in the jurisdiction's hazard and vulnerability analysis <b>(Target: 60 days from identification of risk or hazard/120 days from cooperative agreement award).</b>



## Performance Measures

**3. Decrease the time needed to detect and report chemical, biological, radiological agents in tissue, food, or environmental samples that cause threats to the public's health.**

Percentage of LRN biologic and chemical laboratories that demonstrate proficiency in:

- confirming Category A agents in human clinical specimens (proficiency in accordance with CDC's Laboratory Response Network (LRN) proficiency testing program)
- confirming Category A agents in food samples
- confirming the identity of and further characterizing (e.g., assessment of toxin production, serotyping, phage typing, and DNA "fingerprinting") *Salmonella* (including *Salmonella Typhi*), *Shigella* species, Shiga toxin-producing *E. coli* and pathogenic vibrios isolated from FOOD samples
- confirming Category A agents in environmental samples
- confirming chemical agents in human clinical specimens

Time following initiation of an epidemiological investigation to begin obtaining or directing the acquisition of specimens/samples for laboratory analysis to support epidemiological investigation, as needed (**Target: 60 minutes**)



## Performance Measures

**3. Decrease the time needed to detect and report chemical, biological, radiological agents in tissue, food, or environmental samples that cause threats to the public's health.**

For clinical specimens, environmental samples and samples of potentially contaminated food collected by public health personnel in an emergency, time to:

- send clinical specimens to a reference laboratory within the LRN when an incident may involve an infectious biological agent **(Target: within 60 minutes of collection)**
- send clinical specimens to the CDC or CDC-designated State laboratory when an incident may involve a hazardous chemical agent **(Target: within 180 minutes of collection)**
- send environmental samples to a reference laboratory within the LRN when the incident requires biological or chemical characterization of an incident scene **(Target: within 60 minutes of collection)**
- send potentially contaminated food samples to a reference laboratory within the LRN or coordinate with Food Emergency Response Network (FERN), as appropriate, when the incident might involve food contaminated with a biological or chemical agent **(Target: within 60 minutes of collection)**



## Performance Measures

<b>4. Improve the timeliness and accuracy of information regarding threats to the public's health</b>	<b>Percent of local public health agencies using BioSense or other integrated early event detection system data.</b>
	<b>Percent of desired non-traditional public health data sources that are currently part of early event detection system. (e.g., HMO encounter data, over-the-counter pharmaceutical sales)</b>



## Performance Measures

<b>5. Decrease the time to identify causes, risk factors, and appropriate interventions for those affected by threats to the public's health</b>	<b>Time to initiate epidemiologic investigation after the initial detection of a deviation from normal disease/condition patterns</b>
	<b>Time from initial detection of a deviation from normal disease/condition patterns OR initial report to initiation of intervention (e.g., dissemination of protective action guidance, treatment)</b>



## Performance Measures

<b>6. Decrease the time needed to provide countermeasures and health guidance to those affected by threats to the public's health</b>	<b>Percent of key stakeholders that are notified/alerted using the public health emergency communication system (Target: 90%)</b>
	<b>Time to issue information to the public that emphatically acknowledges the event; explains and informs the public about risk; provides emergency courses of action; commits to continued communication (Target: 60 minutes from activation of the response plan)</b>
	<b>Time to have a knowledgeable public health professional answer a disease report call and begin taking the report 24/7/365 (Target: 15 minutes or less)</b>
	<b>Percent of key stakeholders that are notified/alerted when electricity, telephones, cellular telephone service, and Internet service are unavailable</b>
	<b>Percent of Level Three/Sentinel labs that can reach a designated contact at an LRN laboratory 24/7/365 by phone within 15 minutes OR radio/satellite phone within 5 minutes</b>



## Performance Measures

<b>6. Decrease the time needed to provide countermeasures and health guidance to those affected by threats to the public's health</b>	<b>Time to obtain message approval and authorization for distribution of public health and medical information to clinicians and other responders (Target: 60 minutes from confirmation of health threat)</b>
	<b>Percent of public health responders that have been trained and cleared to use PPE appropriate for their response roles</b>
	<b>Percentage of isolation orders that are violated</b>
	<b>Percentage of quarantine orders that are violated</b>
	<b>Current rating on the SNS preparedness functions</b>
	<b>Time to provide prophylactic protection and/or immunizations to all responders, including non-governmental personnel supporting relief efforts</b>





## Performance Measures

<b>6. Decrease the time needed to provide countermeasures and health guidance to those affected by threats to the public's health</b>	<b>Percent of volunteers needed to support epidemiologic investigation that have been trained</b>
	<b>Percent of volunteers needed to support mass prophylaxis that have been trained</b>



## Performance Measures

**7. Decrease the time needed to restore health services and environmental safety to pre-event levels**

**Time needed to issue interim guidance on risk and protective actions during recovery**



## Performance Measures

**8. Increase the long-term follow-up provided to those affected by threats to the public's health**

**Percent of cases and exposed successfully tracked from identification through disposition to enable short- and long-term follow-up**



## Performance Measures

<b>9. Decrease the time needed to provide countermeasures and health guidance to those affected by threats to the public's health</b>	Time needed to identify deficiencies in personnel, training, equipment, and organizational structure, for areas requiring corrective actions <b>(Target: 72 hours after a real event or exercise)</b>
	Time needed to implement corrective actions <b>(Target: 60 days after identification of deficiency)</b>
	Time needed to re-test areas requiring corrective action <b>(Target: 90 days after identification of deficiency)</b>



## Objective 3

How can state and local public health officials work closely with the Centers for Disease Control and Prevention to participate in the national agenda for preparedness?



## Partnerships

- **National Agenda**

- DHS and the “Target Capabilities List”
- National Preparedness Goal
- NIMS
- NRP

- **COTPER**

- “Board of Scientific Counselors”
- Research Agenda
- Publications of lessons learned
- Performance measures and descriptions



## Objective 4

What are the roles and achievements of the academic institutions that pave the way for implementing CDC FI and policies for preparedness?



## CDC Centers for Public Health Preparedness

Funded initially in 2000 (n=4); More added each subsequent year

### 49 Centers for Public Health Preparedness

- 27 Academic Centers for Public Health Preparedness at Accredited Schools of Public Health (these are funded out of the umbrella CPHP cooperative agreement)
- 22 Specialty Centers for Public Health Preparedness (funded through individual Congressional earmarks)
- 8 Advanced Practice Centers (originally 5, but 3 were added in 2004)





## Objective 4

- The Centers for Public Health Preparedness (CPHP) continue to inform CDC's efforts to improve accountability by developing and implementing methods to measure learning effectiveness and helping to build the evidence base for preparedness education.
- As a result of the Futures Initiative, CDC organizational design emphasizes workforce development and collaboration.
  - The CPHPs contributed to workforce development efforts by achieving 376 preparedness education activities that reached an estimated 127,000+ learners from September 2004 to April 2005.
  - The CPHPs directly support CDC's efforts to enhance *collaboration* through a network of 49 university and college programs engaged in 19 different collaboration groups targeting a variety of preparedness topics, audiences, and methods.